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Strategic Business Overview

Establishing North America's Rare Earth Supply Chain

with Western Innovation

July 24, 2025

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CAUTIONARY NOTES & DISCLAIMERS

This presentation includes certain statements that may be deemed "forward-looking statements". All statements in this presentation (other than statements of historical facts) that address future business development, technological development and/or acquisition activities (including any related required financings), timelines, events, or developments that the Company expects, are forward-looking statements. Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance or results and actual results or developments may differ materially from those in forward-looking statements. The Company has assumed that it will be able to procure or retain additional partners and/or suppliers, in addition to the wholly owned Innovation Metals Corp. ("IMC"), as suppliers for Ucore's expected future Strategic Metals Complexes ("SMCs"). Ucore has also assumed that sufficient external funding will be found to prepare a new National Instrument 43-101 ("NI 43-101") technical report that demonstrates that the Bokan Mountain Rare Earth Element project ("Bokan") is feasible and economically viable for the production of both REE and co-product metals at the then prevailing market prices based upon assumed customer off-take agreements. Ucore has also assumed that sufficient external funding will be secured to develop the specific engineering plans for the SMCs and their construction. Factors that could cause actual results to differ materially from those in forward-looking statements include, without limitation: IMC failing to protect its intellectual property rights associated with the RapidSX™ technology; the RapidSX™ technology failing to demonstrate commercial viability in large commercial-scale applications; Ucore not being able to procure additional key partners or suppliers for the SMCs; Ucore not being able to raise sufficient funds to fund the specific design and construction of the SMCs and/or the continued commercial rollout of RapidSX™ technology; adverse capital-market conditions; unexpected due-diligence findings; the emergence of alternative superior metallurgy and metal-separation technologies; the inability of Ucore and/or IMC to retain its key staff members; a change in the legislation in Alaska and/or in the support expressed by the Alaska Industrial Development and Export Authority ("AIDEA") regarding the development of Bokan and/or the Alaska SMC; the availability and procurement of any required interim and/or long-term financing that may be required; and general economic, market or business conditions.

For more information about Ucore Rare Metals Inc., please see the information that is available on SEDAR (www.sedar.com). Please also see the risk disclosures that are found in Ucore's most recent Management Discussion & Analysis document (filed on May 30, 2023).

For more information about Ucore's mineral resources and related technical information regarding the Bokan Project, please see Ucore's NI 43-101 technical report (a preliminary economic assessment) filed on SEDAR on March 14, 2013, and Ucore's mineral resource update filed on SEDAR on October 15, 2019. Information about the quantity and grades of the indicated and inferred mineral resources are described in these documents and are available therein. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

Qualified Person: Michael L. Schrider, P.E., VP & COO of Ucore, has approved the scientific and technical content of this presentation and is the Qualified Person responsible for its accuracy. Mr. Schrider, is a registered professional engineer in the State of Louisiana, holds a BS degree in engineering from the University of New Orleans and a MEng in mining engineering (mineral process emphasis) from The University of Arizona.

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RARE EARTH ELEMENT PERMANENT MAGNETS

Rare Earth Permanent Magnets are the most efficient means of converting electrical energy to mechanical energy and deliver undisputedly best-in-class EV performance. They are the most dependable/durable and also dominant market share in offshore wind turbines.

National Security

- *US heavily reliant on China for REEs*
- *US initiatives: research on recycling and domestic mining*

Robotics

- *Expected to be the biggest driver of demand for magnet rare earths by 2040*

Electric Vehicles (EVs)

- *Essential for EV motor magnets*
- *Boosts torque, fuel efficiency, and reduces emissions*
- *Key REEs: neodymium, praseodymium, dysprosium*

Wind Energy

- *Vital for turbine generators and magnets*
- *Growing demand with the rise of renewable energy*

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ROBOTICS - THE LARGEST DRIVER FOR PERMANENT MAGNETS!

By 2040, **the robotics sector** is poised to be one of the top drivers of rare earth element (REE) demand, particularly for neodymium, praseodymium, and dysprosium. These elements are essential for manufacturing high-performance NdFeB (neodymium iron-boron) magnets used in autonomous systems.

Soaring Growth of Robotics for the Future:

- ***Automation Growth:*** *Robotics will revolutionize industries, enhancing efficiency with intelligent manufacturing.*
- ***Mobility:*** *Autonomous transport will reduce congestion and emissions.*
- ***Hospitality:*** *Rare earths power advanced motors and sensors will accelerate humanoid robots.*
- ***Global Adoption:*** *Robotics will expand across logistic sectors, driving up REE demand.*

"Robots are expected to be the biggest driver of demand for magnet rare earths by 2040 "

- Adamas Intelligence

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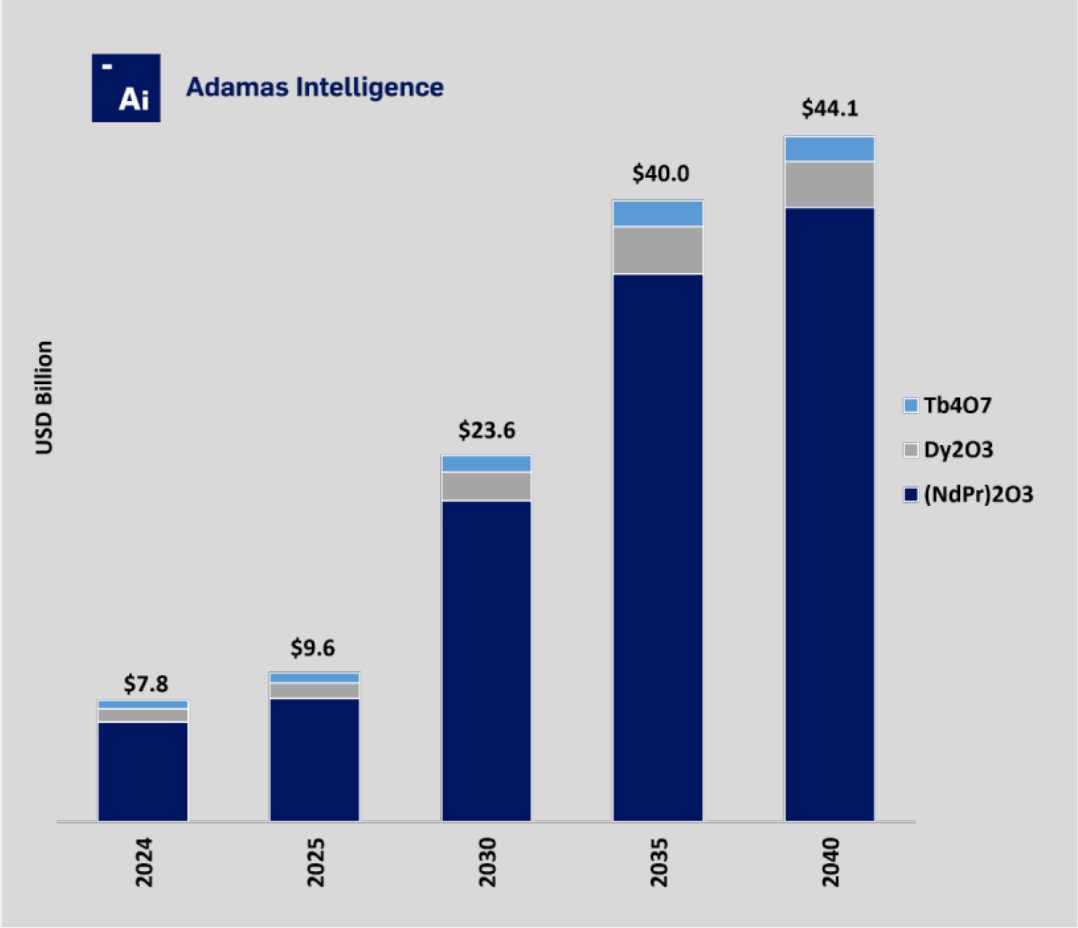
SIGNIFICANT RARE EARTH OXIDE SUPPLY INCREASES NEEDED

- *Global magnet rare earth oxide consumption will increase by **200%** by the end of the decade, and more than **five-fold by 2040**, from **US $7.8 billion** in 2024 to **US $44.1 billion** by 2040.*

- *For China alone to close the growing supply gap projected between 2027 and 2040 will require annual production at Bayan Obo to **increase nearly five-fold**, massively depleting the country's reserves.*

- *Conversely, for ex-China suppliers to close the growing supply gap will require the development of another **20 to 30** modest-scale mines by 2040 and significant midstream separation and refining capacity.*



CHINA BENEFITS FROM MASSIVE SCALE AND 40 YEARS OF UNCONTESTED EXPERTISE DEVELOPMENT

Regional Share	Mining	Oxides	Metals & Aloys	NdFeB Magnet
China	67%	88%	92%	93%
USA	10%	<1 %	0%	<1 %
Europe	0%	<1 %	<1 %	<1 %
Australia	9%	0%	0%	0%
Japan	0%	0%	7%	6%
Other	14%	10%	1%	1%

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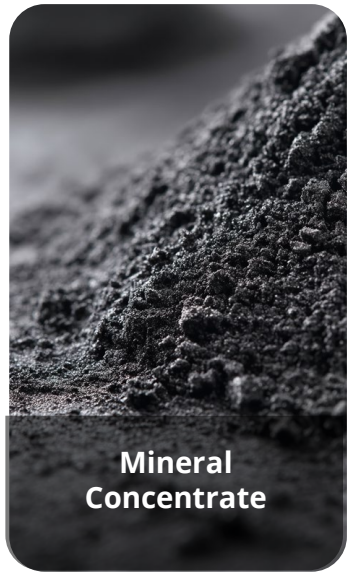
THE RARE EARTH ELEMENT **SUPPLY CHAIN**

Separation is Key *for North American Control of its REE Supply Chain*

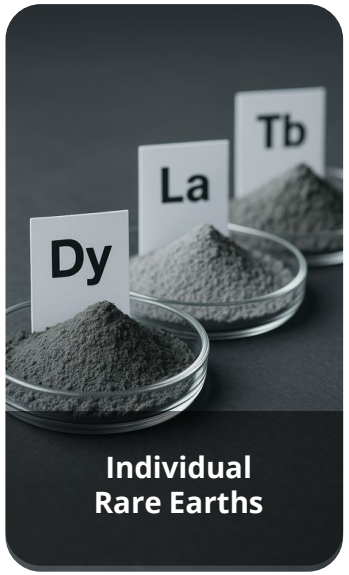
Ucore's Plan of a North American REE Supply Chain

Upstream



US/US-Friendly Resources

Initial SMC Midstream Focus



RapidSX™ Technology
Self-Use, JV's & Licensing

Downstream

US/US-Friendly Partners

Ucore is strategically positioning itself into the North American midstream of REO production:

- *Multiple HREE and/or LREE sources of US-Friendly feedstock for the production of individual REOs in 2025*
- *HREE prioritized OEM supply*
- ***Multiple SMCs in development*** *based on modern RapidSX™ technology*
- *Separation to REOs is the most difficult aspect of the REE Supply Chain*
- *Unique strategy to Ucore, limited to nil competition*

TO SUCCEED, THE WEST MUST INNOVATE

THE CHALLENGES:

- *Lack of **Midstream Refining** and Processing Capacity.*
- *Primary Extraction often Remotely Located & Domestic Mining **Permits Can Take a Decade.***
- ***Heavy Rare Earth Sources** are Controlled by China and Developing Ones Pre-Sold to China.*
- *Lack of Qualified People for Downstream Processing – **China to Double REPM by 2025**.*
- *Until Western Producers Can **Demonstrate Ongoing Supply** – OEMs Can't De-Couple!*
- ***Nascent Recycling Ecosystems** & Low Domestic Feed Quantities.*

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RARE EARTH ELEMENT OUTLOOK TO 2030

The Challenge

- China:
  - mines ***60%+ Global REE Resources***
  - manufactures ***90%+ Global REE Components***
  - will eventually consume ***100% of its Production***
- Minimal North American REE Infrastructure
- REE security of supply has become a western democracy strategic concern

The Opportunity

2030 Total REO Projections

Outlook 2035:

- *With total magnet rare earth oxide demand forecasted to increase at a CAGR of 8.3%, the value of global rare earth oxide consumption will grow to US $49 Billion by 2035.* (Adamas Intelligence)
- *Goal is based on a combination of self-use and JV refining with feedstock sources*

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INNOVATE THE WAY YOU APPROACH SEPARATION

Industrial Revolution

1760-1840

- *Machines Replace Hand Tools*
- *Factory System*

Ford's Moving Assembly Line

1913

- *Vehicles Move Not People*
- *Work Smarter*

Lean Manufacturing

1913-1988

- *American & Japanese Automakers Lay Groundwork*
- *Repetitive Manual Tasks*
- *30-40% Operating Time*

ucore RapidSX™

Digital Manufacturing and Flexible Workcells

21st Century Breakthrough

- *AI With Machine Learning*
- *Co-Bots & Vision Systems*
- *Multi-purpose Workcells with 80% Operating Time*

"The Rare Earth problem is in the Separation Plants and the base technology used. Finding a new method would solve the Rare Earths Problem." *- Tim Worstall, Global REE Expert*

RAPIDSX™ TECHNOLOGY

RapidSX™ is a Transformative REE Separation Technology

Key Advantages vs. Conventional SX

Columns Utilizes up to 70% Less Floor Space

↓

Significant Reduction in CAPEX & Physical/Environmental Footprint

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Up to 3-7X Faster Throughput

↓

Significant OPEX Reduction

- Labor - $/hour/kg processed
- Power - $/hour/kg processed
- Reagent Loops - up to 70% savings

↓

Rapid WIP Inventory Turnover

Virtually Feedstock Agnostic – HREE & LREE

Closed Loop / Start & Stop Plant

The RapidSX™ 80 tpa Commercialization and Demonstration Facility (CDF) *Kingston, Ontario*

Same Proven Chemistry as Solvent Extraction (SX)

Enhanced Through Patent Pending Computerized Column Technology

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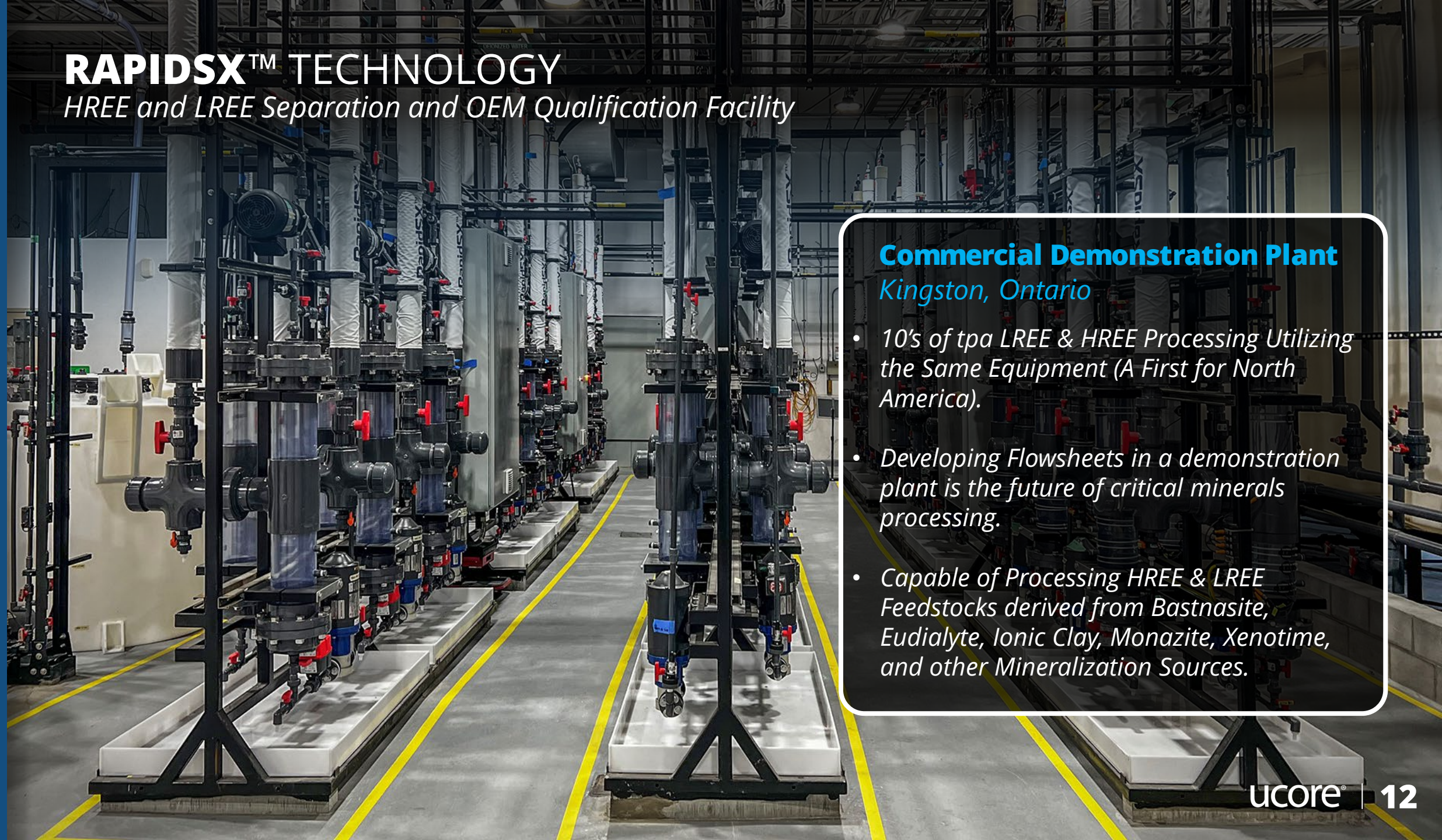
RAPIDSX™ TECHNOLOGY

HREE and LREE Separation and OEM Qualification Facility



Commercial Demonstration Plant

Kingston, Ontario

- *10's of tpa LREE & HREE Processing Utilizing the Same Equipment (A First for North America).*
- *Developing Flowsheets in a demonstration plant is the future of critical minerals processing.*
- *Capable of Processing HREE & LREE Feedstocks derived from Bastnasite, Eudialyte, Ionic Clay, Monazite, Xenotime, and other Mineralization Sources.*

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THE SMC BUSINESS MODEL

Multiple Planned Strategic Metals Complex Facilities with SMC No. 1 Developed in Louisiana

Production Summary:

- ***SMC production process*** *will commence after the installation of* ***(3) RapidSX™ Machines*** *focused on early* ***Tb & Dy production****. Two more Machines will then be added to* ***complete the Phase 1 Train***
- *Once* ***Phase 1 Train production starts****, it does not stop for the installation of:*
  - *the sequential installation of* ***1 RapidSX™ Train during Phase 2, and 2 RapidSX™ Trains during Phase 3***
    (Each Train consists of five (5) RapidSX™ Machines)
  - *once a Train is completed,* ***it is brought into production***
  - *each Train is capable of processing* ***2400 to 3000 tpa of TREO concentrates for NdPr, Tb, and Dy production***
- *The facility will also have a* ***dedicated RapidSX™ Machine*** *for single-element production of* ***Pr, Nd, Sm, Gd, et al.***

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GOVERNMENT SUPPORT

Federal, State and Local Support

"Clean vehicle EV tax credits can provide up to $7500 for final assembly in North America"

"REE Magnet Manufacturing 2023 tax credit proposes $30/kg credit if 90% from US producers".

US Department of Defense – US $4M OTA

- *Processing tonnes of HREO Feedstock at Commercial Demonstration Facility – Kingston, Ontario, Canada*
- *Other Transaction Agreement – Potential Follow-on Award - $10M*
- *Demonstrate capability to deploy Rare Earth Separation Technology in the United States*

Government of Canada – $ 4.3 M

- *Funding agreement from the Government of Canada for the demonstration of Ucore's RapidSX™ Rare Earth Element Separation Technology Capabilities*
- *Ucore will produce high-purity NdPr, Pr and Nd over a 6-month period from 13-15 tonnes of Canadian and US feedstock sources*

Government of Canada

STRATEGIC US GOVERNMENT SUPPORT

USD $18.4M Agreement with US DOD

The aim of this additional US $18.4M funding is to construct the first production-ready, commercial RapidSX™ machine and supporting infrastructure at Ucore's planned Strategic Metals Complex (SMC) in Alexandria, Louisiana.

Ucore is targeting commissioning of the Louisiana SMC in H2/26

The objective of the firm fixed price agreement is to:

- *Construct and demonstrate a full-scale RapidSX™ module*
- *Facilitate a knowledge transfer of the RapidSX™ separation technology from the CDF to the SMC, and*
- *Install production capacity at the SMC for processing hundreds of tonnes of TREOs utilizing RapidSX ™*

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GOVERNMENT SUPPORT

Federal, State and Local Support

State of Louisiana – US $15M LOI

- *Ongoing financial incentives, including tax incentives, payroll rebates, infrastructure improvements, and other programs*
- *Incentive Package includes US$ 900k for Infrastructure Improvements*
- *Administered by Louisiana Economic Development*

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FEEDSTOCK PARTNERS

Feedstock Partnerships

Cyclic Materials™

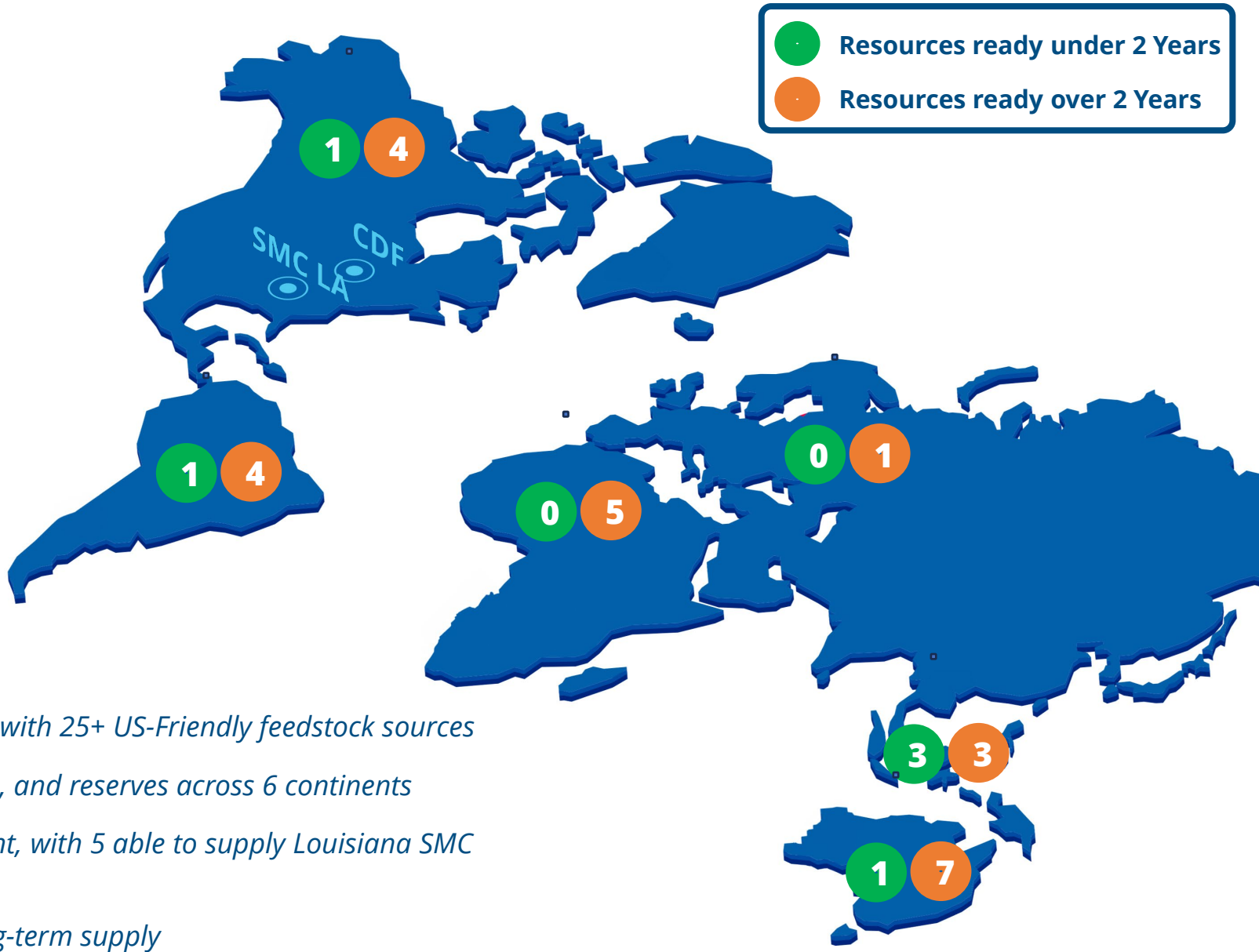
ABx Group

thyssenkrupp

METEORIC RESOURCES

DEFENSE METALS

Prospective Feedstock Availability by Continent



- *Discussions & Negotiations at various stages with 25+ US-Friendly feedstock sources*
- *Significant LREE and HREE sources, resources, and reserves across 6 continents*
- *Projects are at differing stages of development, with 5 able to supply Louisiana SMC for Q4-2025 commissioning*
- *Ongoing Due Diligence to ensure reliable long-term supply*

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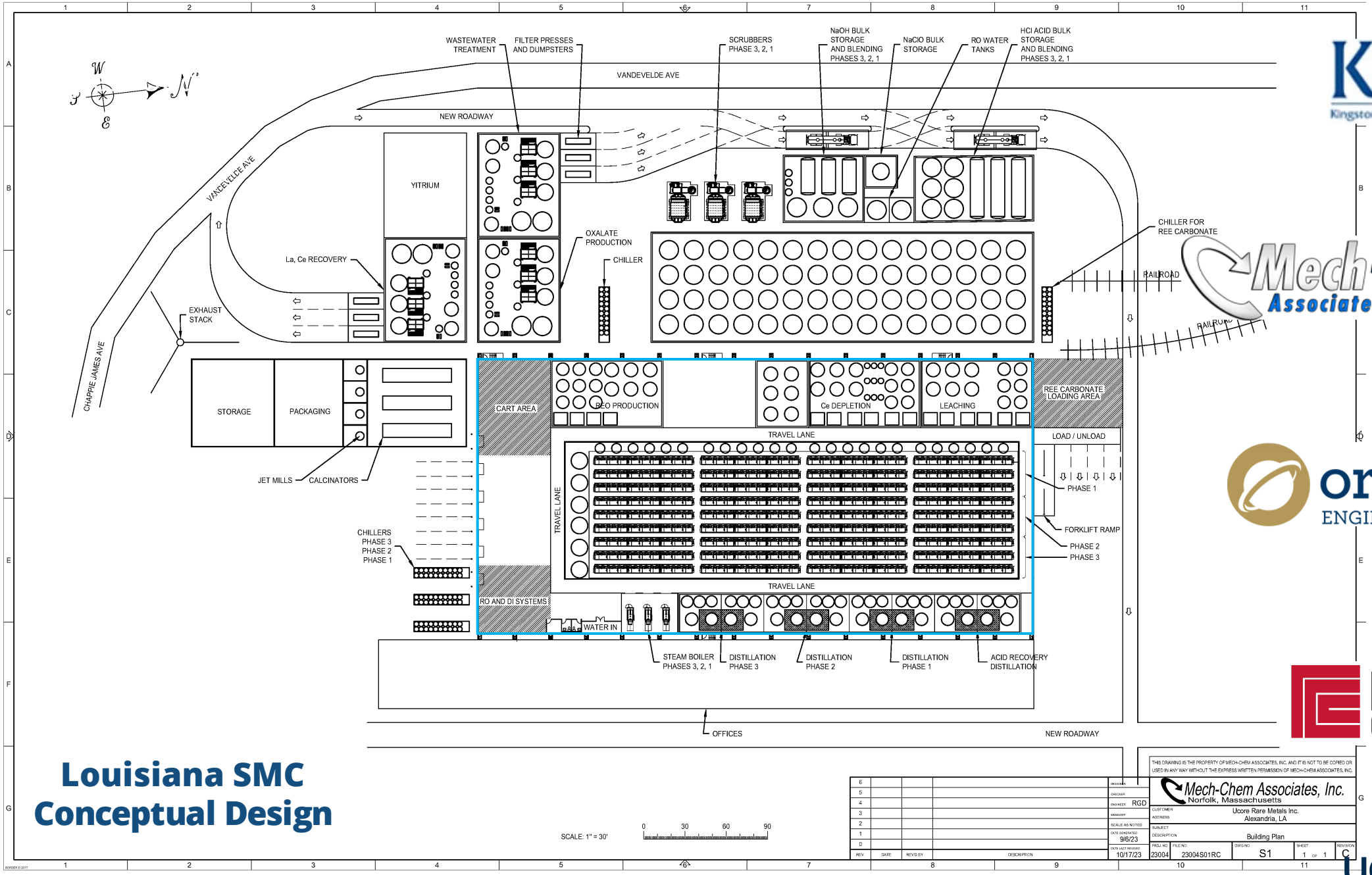

Louisiana SMC Conceptual Design

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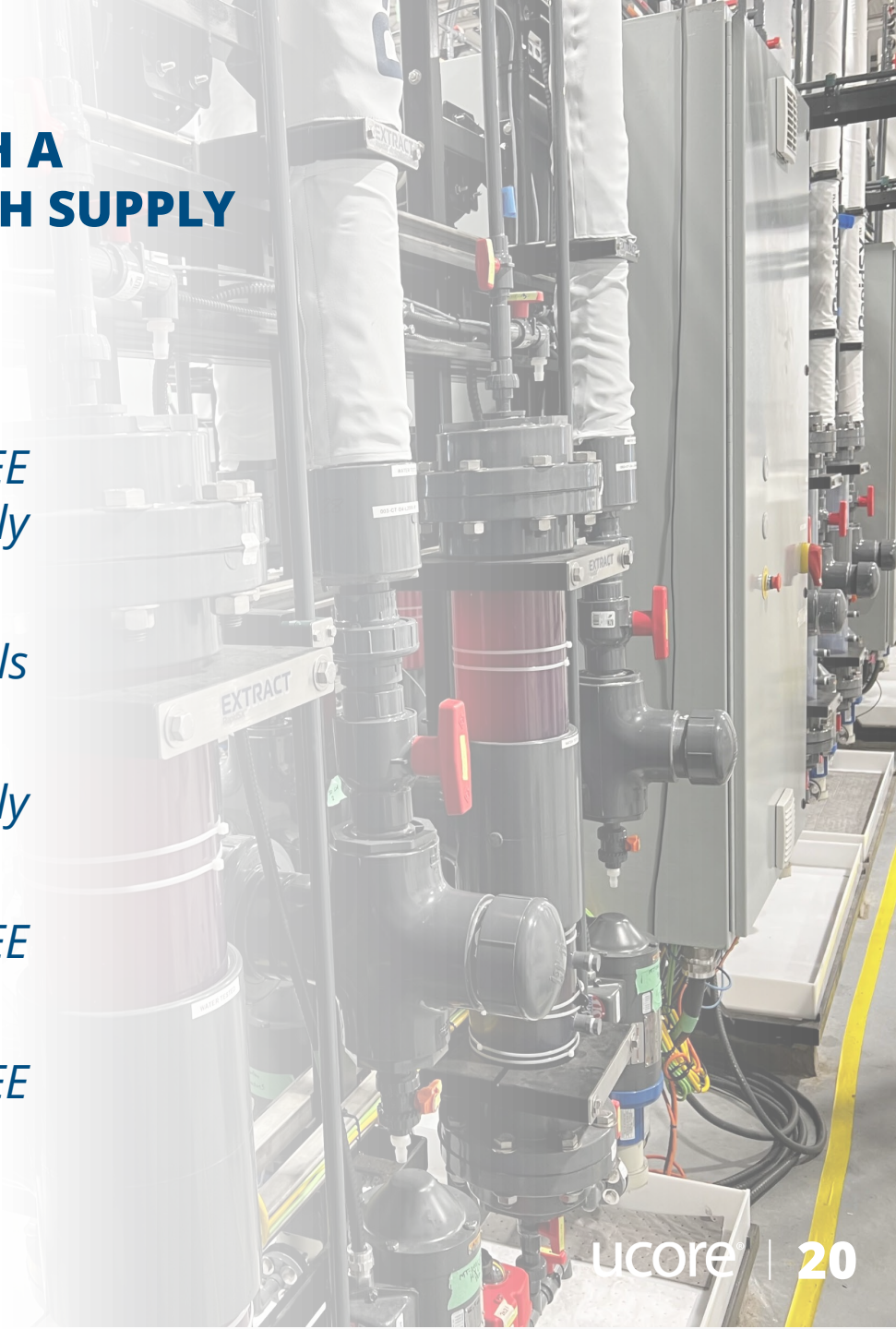
EXPECTED NEAR TERM DRIVERS

- ***The US Department of Defense*** *awarded a* ***$4 M*** *"Other Transaction Agreement" to Process HREO Feedstock at the Kingston Demo Facility (CDF).*
  - *An approval for approximately 80% of the completed DOD work is expected in Q2 2025.*
  - *There has been an* ***US $18.4 M agreement with the US DOD, further construction funding may be possible in 2025.***
- *Outside of China 90% of the metal/alloy production and magnet making industries reside in* ***Japan and South Korea****.* ***Multiple visits from major players*** *from these regions have occurred in 2024.* ***MOU's with REO samples*** *are expected to be delivered before the end of Q3 2025 with* ***MOUs for "offtakes" made known****.*
- *Opportunities for Ucore to partner and "vertically" integrate further downstream from its separating and refining of REOs are possible. (Think alloy/metal making)*
- ***Feasibility studies*** *to support the Strategic Metals Complex (SMC) for Louisiana are underway and will be forthcoming.*
- ***Definitive Western-world friendly feedstock*** *arrangements for SMC Louisiana are possible in the* ***next 3 months****..*

UCORE - A NORTH AMERICAN "FIRST MOVER" WITH A MULTI-PRONGED STRATEGY TO DE-RISK RARE EARTH SUPPLY

- *Derisking not decoupling from Chinese dominance*
- *Operating a Commercial Demonstration LREE & HREE Separation and OEM Product Qualification Plant (The Only HREE Processing Plant in North America)*
- *Deploying Next-Generation RapidSX™ Critical Metals Separation Technology*
- *Aligning Numerous and Geographically Diverse US-Friendly Feedstock Sources*
- *Establishing North America's First Modern LREE & HREE Commercial Separation Facility in Louisiana*
- *Engaging other Jurisdictions for Multiple LREE & HREE Commercial Separation Facilities Over the Next 2-5 years*



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